

Verification Monitoring Report for the Riverton, Wyoming, Processing Site, Update for 2004

April 2005



Office of Legacy Management

Verification Monitoring Report for the Riverton, Wyoming, Processing Site

Update for 2004

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1.0 Introduction

The compliance strategy for the Riverton, Wyoming, Processing Site (Riverton site) is natural flushing in conjunction with institutional controls (ICs) and continued monitoring (DOE 1998a). Monitoring during the natural flushing period is referred to as verification monitoring because the purpose of the monitoring is to verify the natural flushing strategy is progressing as predicted and to verify ICs are in place and functioning as intended. Data collected during verification monitoring are reported annually in a Verification Monitoring Report. The first verification monitoring report for the Riverton site was issued in 2001. This report entitled *Verification Monitoring Report, Riverton, Wyoming UMTRA Project Site* (DOE 2001), provided summary of site conditions and evaluated monitoring data collected from 1996 to 2001. Annual updates to the original report provide evaluations of data collected during each subsequent year (DOE 2002, DOE 2003).

The purpose of this report is to present and evaluate the data collected during 2004 and to provide an annual update on the progress of the natural flushing compliance strategy. In 2004, monitoring frequency was increased from annual to semiannual, and the network of wells and surface water locations was increased as part of an expansion of the long-term verification-monitoring network. This update is based on results from two sampling events conducted at the Riverton Site during May and October 2004.

2.0 Site Conditions

2.1 Hydrogeology

The Riverton site is located on an alluvial terrace between the Wind River and the Little Wind River approximately 2.3 miles southwest of the town of Riverton, Wyoming (Figure 1). Ground water occurs in three aquifers beneath the site: (1) surficial unconfined aquifer (surficial aquifer), (2) middle semiconfined aquifer, and (3) deeper confined aquifer (DOE 1998b). The surficial aquifer consists of the unconsolidated alluvial material, and the semiconfined and confined aquifers are composed of shales and sandstones of the upper units of the Eocene Wind River Formation. Ground water in the surficial aquifer flows to the southeast. Depth to ground water in the surficial aquifer is generally less than 10 feet (ft) below land surface.

2.2 Water Quality

Shallow ground water beneath and downgradient from the site was contaminated as a result of uranium processing activities from 1958 through 1963 (DOE 1998b). Constituents of potential concern (COPC) in the ground water beneath the Riverton site are manganese, molybdenum, sulfate, and uranium. COPCs were selected using a screening process that evaluated constituent concentrations against maximum concentration limits (MCLs), potential human health risks, and potential ecological risks. The COPC selection process is detailed in the *Environmental Assessment of Ground Water Compliance at the Riverton, Wyoming, Uranium Mill Tailings Site* (DOE 1998c). Uranium and molybdenum were selected as indicator constituents for compliance monitoring in the *Final Ground Water Compliance Action Plan for the Riverton, Wyoming, Title I UMTRA Project Site* (DOE 1998a). These constituents were selected as indicator

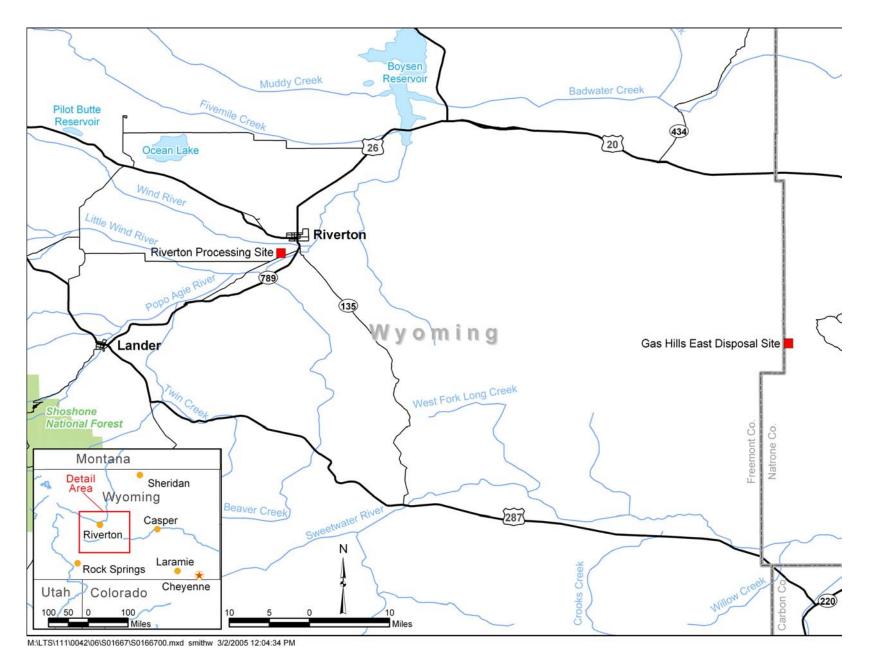


Figure 1. Site Location Map

constituents because they are sufficiently distributed to form volumetric aqueous plumes in the uppermost aquifer in the vicinity of the site. The MCL for uranium and molybdenum are 0.044 milligrams per liter (mg/L) and 0.10 mg/L, respectively.

2.3 Surface Remediation Activities

Uranium mill tailings and other contaminated materials were removed from the Riverton processing site during 1988-1989 and encapsulated at the Umetco Gas Hills East disposal site (Figure 1).

2.4 Institutional Controls

In order to be protective of human health and the environment during the natural flushing period, ICs are required to control exposure to contaminated ground water. An institutional control boundary has been established at the Riverton site (Figure 2), which delineates the area that requires protection. The IC boundary was set to encompass the area of current ground water contamination with a buffer zone to account for potential future plume migration.

Cooperative efforts among the U. S. Department of Energy (DOE), the Arapaho and Shoshone Tribes, and the State of Wyoming continue in order to obtain viable and enforceable ICs at the Riverton site, although they have not been finalized. DOE funded an alternate drinking water supply system in 1998 to provide potable water to residents living within the IC area. However, elevated concentrations of radionuclides were identified in the system in 2002 (Babits 2003), and were confirmed with data collected during the May 2004 sampling event. DOE is currently funding an independent analysis of the alternate water supply system to determine the source of the elevated radionuclides and determine the integrity and long-term viability of the system. DOE also is pursuing well installation restrictions within the IC area with the Tribes and State of Wyoming.

3.0 Monitoring Program

The monitoring program in 2004 was expanded to include additional monitor wells and surface water locations that will enhance the delineation of the contaminant plumes and improve the ability to assess future contaminant plume movement. Domestic wells within the IC boundary that are used as a potable water source also were added into the monitoring program in 2004. Monitoring of these domestic wells will continue long term to verify that COPC concentrations remain low. Locations sampled during 2004 are listed in Table 1 and shown in Figure 3.

In addition to routine monitoring, samples were collected from the alternate water supply system in response to elevated radionuclides detected in a study conducted for the Wind River Environmental Quality Commission (WREQC) and the U.S. Environmental Protection Agency Region VIII (Babits 2003). Nine locations on the alternate water supply system were sampled during the May event including four tap locations, four hydrant locations, and the supply well for the system.

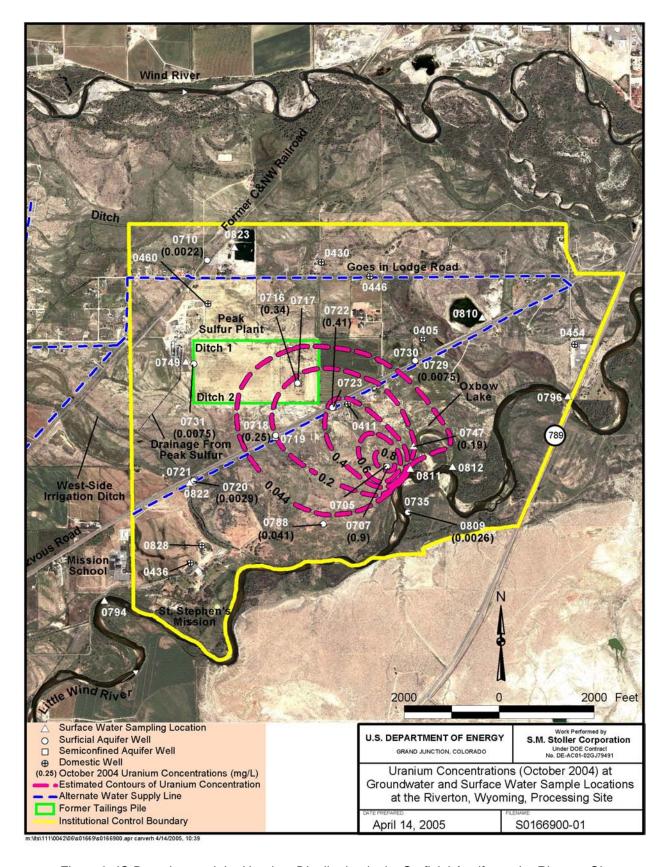


Figure 2. IC Boundary and the Uranium Distribution in the Surficial Aquifer at the Riverton Site

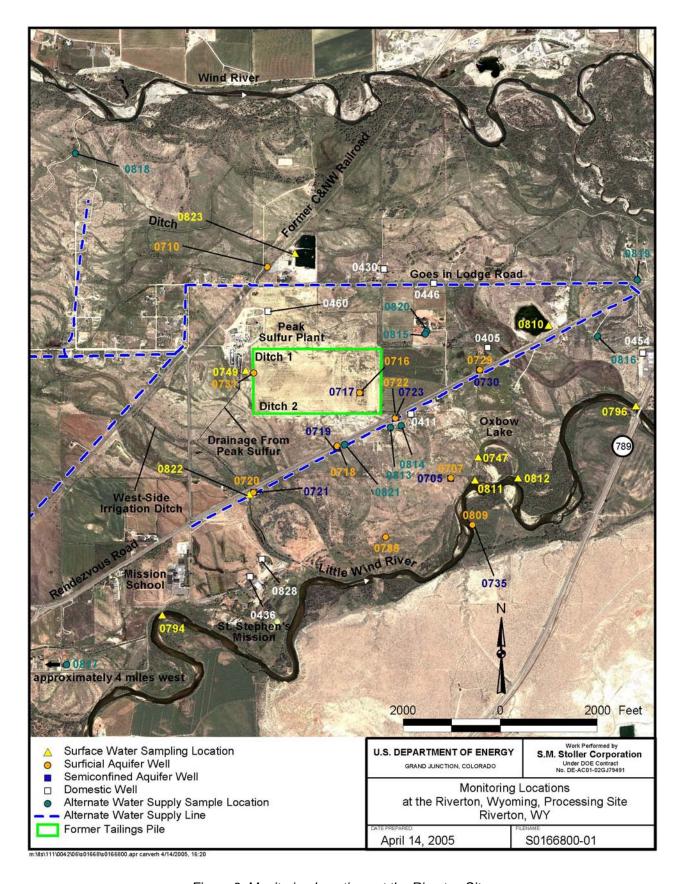


Figure 3. Monitoring Locations at the Riverton Site

Table 1. 2004 Sampling Network at the Riverton Site

Location ID	Description	Sampling Event	Rationale
DOE Monitor	Wells		
0705	Semiconfined aquifer	May, October	Monitor semiconfined aquifer
0707	Surficial aquifer	May, October	Centriod of plume
0710	Surficial aquifer	May, October	Background
0716	Surficial aquifer	May, October	Upgradient portion of plume
0717	Semiconfined aquifer	May, October	Monitor semiconfined aquifer
0718	Surficial aquifer	May, October	Monitor lateral plume movement
0719	Semiconfined aquifer	May, October	Monitor semiconfined aquifer
0720	Surficial aquifer	May, October	Monitor potential plume movement
0721	Semiconfined aquifer	May, October	Monitor semiconfined aquifer
0722	Surficial aquifer	May, October	Monitor plume movement
0723	Semiconfined aquifer	May, October	Monitor semiconfined aquifer
0729	Surficial aquifer	May, October	Monitor potential plume movement
0730	Semiconfined aquifer	May, October	Monitor semiconfined aquifer
0731	Surficial aquifer	May, October	Upper cross gradient from plume
0735	Semiconfined aquifer	May, October	Monitor semiconfined aquifer
0788	Surficial aquifer	October	Monitor lateral plume movement
0809	Surficial aquifer	May, October	Monitor potential plume migration south of river
Domestic Wel	ls		
0405	Blomberg residence	October	Verify low concentrations of COPCs
0411	Goggles residence	October	Verify low concentrations of COPCs
0430	Raymond residence	October	Verify low concentrations of COPCs
0436	St Stephens Mission	October	Verify low concentrations of COPCs
0446	Givens residence	October	Verify low concentrations of COPCs
0454	789 Bingo/Truck Stop	October	Verify low concentrations of COPCs
0460	Peak Sulfur Plant	October	Verify low concentrations of COPCs
0828	St Stephens Mission	October	Verify low concentrations of COPCs
Surface Water			,
0747	Oxbow lake	May, October	Impacted by ground water discharge
0749	Peak Sulfur ditch	May, October	Effluent from sulfur plant
0794	Little Wind River	May, October	Upstream of predicted plume discharge
0796	Little Wind River	May, October	Downstream of predicted plume discharge
0810	Pond – former gravel pit	May, October	Potential for impact – within IC boundary
0811	Little Wind River	May, October	Within area of predicted plume discharge
0812	Little Wind River	May, October	Within area of predicted plume discharge
0822	West side irrigation ditch	May, October	Potential for impact – within IC boundary
0823	Pond – former gravel pit	October	Upgradient of plume; within IC area
Alternate Water	er Supply System	<u>, </u>	, , ,
0813	Tap	May	Confirm WREQC sampling results
0814	Tap	May	Confirm WREQC sampling results
0815	Tap	May	Confirm WREQC sampling results
0816	Tap	May	Confirm WREQC sampling results
0817	Source well for the water system	May	Confirm WREQC sampling results
0818	Hydrant	May	Confirm WREQC sampling results
0819	Hydrant	May	Confirm WREQC sampling results
0820	Hydrant	May	Confirm WREQC sampling results
0821	Hydrant	May	Confirm WREQC sampling results

The long-term monitoring network will continue to expand in 2005 with installation of additional wells along the lateral edge of the plume. The final long-term monitoring network will be specified in the *Long-Term Management Plan for the Riverton, Wyoming, Processing Site* (in progress).

4.0 Results of 2004 Monitoring

4.1 Ground Water

Results of the monitoring program to date show that concentrations of uranium and molybdenum in ground water in the surficial aquifer are still above the respective maximum concentration limits (MCL); however, concentrations are decreasing, indicating that natural flushing is occurring in the surficial aquifer. Time versus concentration plots for uranium and molybdenum in wells located within the contaminant plume in the surficial aquifer are shown in Figures 4 and 5, respectively. The distribution of uranium in the surficial aquifer, based on the October 2004 sampling results, is shown on Figure 2. The distribution of molybdenum in ground water is similar to that of uranium. Concentrations of uranium and molybdenum in ground water in the semiconfined aquifer are still significantly below the respective MCLs, indicating no impact of site-related contamination to this unit (Figures 4 and 5). Ground water quality data by parameter for locations sampled during 2004 are provided in Appendix A.

4.2 Domestic Wells

All domestic wells sampled in 2004 are completed in the confined aquifer. Results from domestic wells do not indicate any impacts from the Riverton site. Concentrations of molybdenum and uranium in samples collected from domestic wells were two to three orders of magnitude below their respective standards. Data obtained from sampling of domestic wells in 2004 are provided in Appendix B.

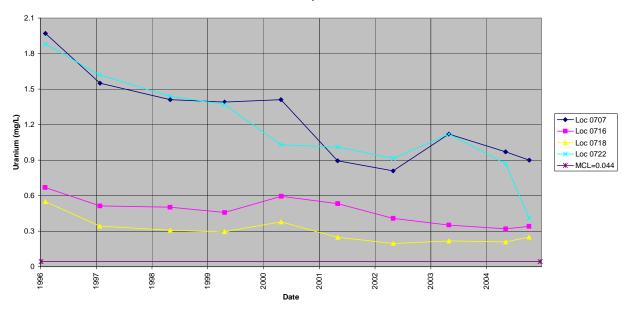
4.3 Surface Water

Contaminated ground water likely discharges to the Little Wind River, but there is no evidence of impact to surface water quality in the river. The pond locations (0810 and 0823) and the west side irrigation ditch (0822) had low concentrations of uranium and molybdenum, indicating minimal impacts from the site. Uranium concentrations over time in river and pond locations are shown in Figure 6.

The sample collected at the ditch that discharges from the Peak Sulfur plant (0749) had elevated concentrations of sulfate (2,600 mg/L in October). The elevated sulfate concentration from the Peak Sulfur ditch has affected the sulfate concentration downstream in the west side irrigation ditch (1,200 mg/L at location 0822).

Concentrations of uranium are elevated in surface water in the oxbow lake (location 0747), which was formed by a shift in the river path in 1994 (Figure 3). Data indicate that the oxbow lake is recharged by contaminated ground water, and elevated concentrations are expected. As shown in Figure 6, concentrations of uranium in the oxbow lake have been variable over time.

Surficial Aquifer Wells



Semiconfined Aquifer Wells

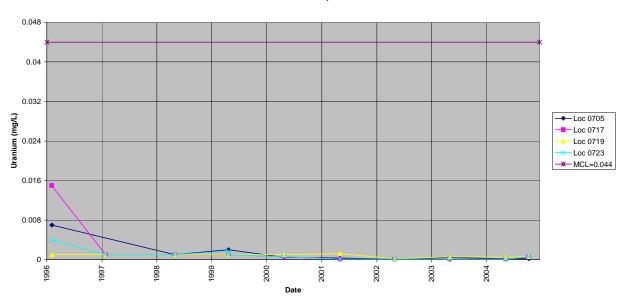
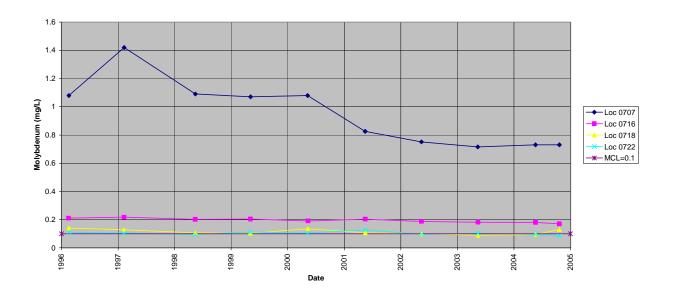


Figure 4. Time Versus Concentration Plots for Uranium

Surficial Aquifer Wells



Semiconfined Aquifer Wells

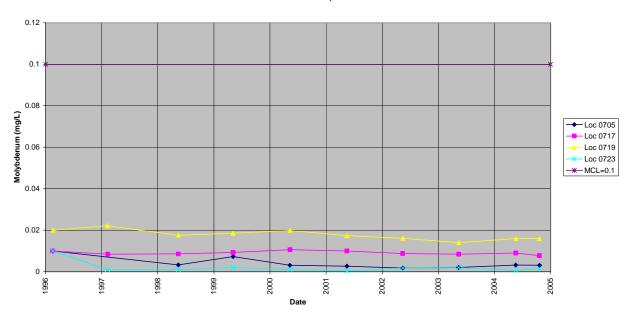
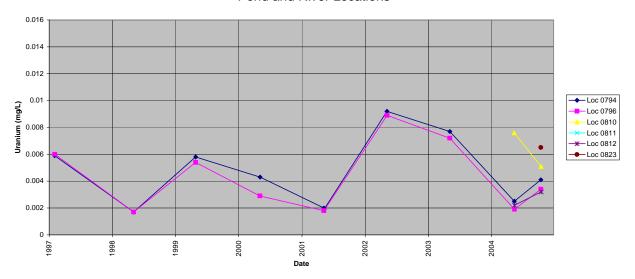


Figure 5. Time Versus Concentration Plots for Molybdenum

Pond and River Locations



Oxbow Lake

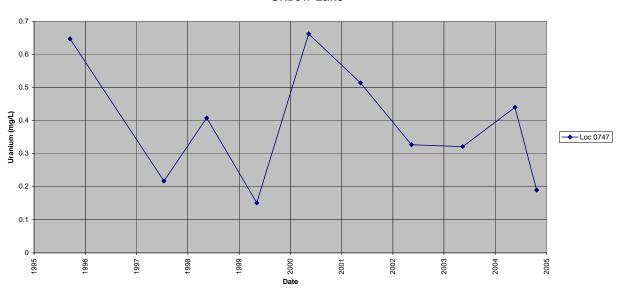


Figure 6. Uranium Concentrations in Surface Water at the Riverton Site

This variability is attributed to inflow from the Little Wind River during high river stage causing a dilution of uranium concentrations. As future sampling events are conducted during low river stage (October), contaminant concentration trends in the oxbow lake will be evaluated. Surface water quality data by parameter for locations sampled during 2004 are provided in Appendix C.

4.4 Alternate Water Supply System

Sampling of the alternate water supply system confirmed results of the WREQC study (Babits 2003). No indication of contamination was found at tap locations or at the source well; however, elevated radionuclides were detected at the hydrant locations subsequent to flushing. Results of the alternate water supply sampling are in Appendix D.

Samples collected from all tap locations and the source well had low concentrations of radium-226 (below detection), radium-228 (below detection), gross alpha (< 2 pCi/L), and gross beta (< 4 pCi/L), which indicates there is not a radiological contamination problem in these portions of the system. In addition, samples collected from all locations (including hydrants) had uranium concentrations less than 0.0002 mg/L, indicating no impact to the alternate water supply system from site-related ground water contamination.

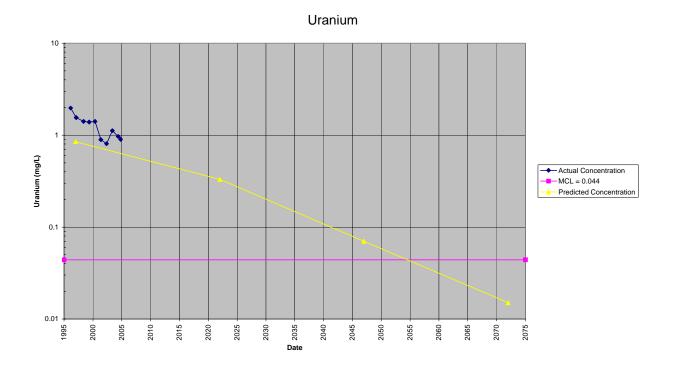
All samples collected from hydrant locations, however, had elevated concentrations of radionuclides when compared to radionuclide concentrations in the sample collected from the supply well for the system. The sample collected from hydrant location 0820 exceeded primary drinking water standards for gross alpha (15 pCi/L) and radium-226 + radium-228 (5 pCi/L), with concentrations of 70.7 pCi/L and 15.91 pCi/L, respectively. Samples collected from hydrant locations 0818 and 0919 had gross alpha concentrations (16.4 pCi/L and 18.6 pCi/L, respectively) that also exceeded the gross alpha standard. Hydrant locations were sampled after 30 minutes of flushing. The cause of the elevated radionuclides is currently being evaluated by an independent engineering firm.

5.0 Conclusions

Uranium and molybdenum are the indicator constituents for compliance monitoring at the Riverton site (DOE 1998). While concentrations of both uranium and molybdenum in ground water in the surficial aquifer are still above their respective MCLs, levels are generally decreasing, indicating that natural flushing is occurring in the aquifer. Surface water in the oxbow lake continues to be impacted as it is recharged by shallow ground water from the contaminant plume.

Comparison of concentrations of uranium and molybdenum in ground water in the surficial aquifer predicted by probabilistic hydrogeologic modeling, versus actual concentrations determined by analysis of samples from monitor well 0707 (located at the center of the contaminant plumes), are shown in Figure 7. To date, concentrations of uranium and molybdenum are following the downward trend and are within the expected range of model predictions.

Verification monitoring of ground water and surface water from designated locations will continue on a semiannual basis, and the long term monitoring program will be specified in the *Long Term Management Plan for the Riverton, Wyoming, Processing Site* (in progress).



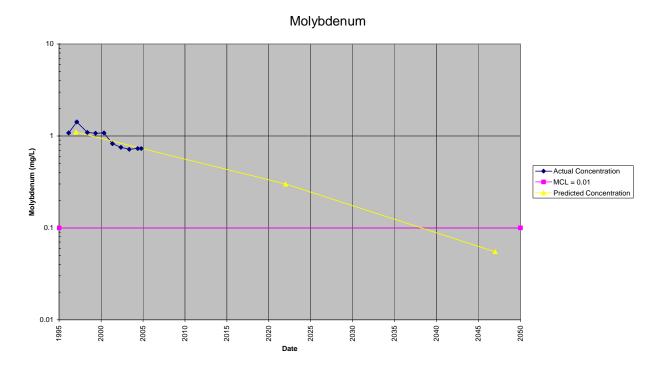


Figure 7. Comparison of Analyte Concentrations in Surficial Aquifer Ground Water versus Ground Water Model Predictions

6.0 References

Babits, S., 2003. Wind River Environmental Quality Commission UMTRA Program - Phase II Groundwater/Drinking Water Final Report, prepared for Wind River Environmental Quality Commission and U.S. Environmental Protection Agency Region VIII, Lander, Wyoming, September.

Update for 2003, GJO-2003-461-TAC, U.S. Department of Energy, Grand Junction Office, July.

Appendix A Ground Water Quality Data

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIER LAB DATA	RS: QA	DETECTION LIMIT	UN- CERTAINT
Alkalinity, Total (As CaCO3	mg/L	0705	WL	05/19/2004	0001	SE	D	65	QF	#		
	mg/L	0705	WL	10/21/2004	0001	SE	D	62	QF	#	<u>-</u>	_
	mg/L	0707	WL	05/19/2004	0001	SF	D	311	F	#	-	_
	mg/L	0707	WL	10/21/2004	0001	SF	D	314	F	#	_	_
	mg/L	0710	WL	05/18/2004	0001	SF	U	219	F	#	_	~
	mg/L	0710	WL	10/19/2004	0001	SF	U	175	F	#	_	_
	mg/L	0716	WL	05/20/2004	0001	SF	0	293	F	#	_	_
	mg/L	0716	WL	10/20/2004	0001	SF	0	281	F	#	_	_
	mg/L	0717	WL	05/20/2004	0001	SE	0	212	F	#	_	_
	mg/L	0717	WL	10/20/2004	0001	SE	0	196	F	#	_	-
	mg/L	0718	WL	05/20/2004	0001	SF	D	423	F	#	_	_
	mg/L	0718	WL	10/20/2004	0001	SF	D	384	F	#	_	_
	mg/L	0719	WL	05/20/2004	0001	SE	D	97	QF	#	-	_
	mg/L	0719	WL	10/20/2004	0001	SE	D	95	QF	#	_	_
	mg/L	0720	WL	05/18/2004	0001	SF	С	350	F	#	_	_
	mg/L	0720	WL	10/19/2004	0001	SF	С ,	183	F	#	-	_
	mg/L	0721	WL	05/18/2004	0001	SE	С	90	F	#	_	_
	mg/L	0721	WL	10/19/2004	0001	SE	С	94	F	#	_	_
	mg/L	0722	WL	05/20/2004	0001	SF	D	299	F	#	_	_
	mg/L	0722	WL	10/20/2004	0001	SF	D	315	F	#	_	_
	mg/L	0723	WL	05/20/2004	0001	SE	D	479	F	#	<u>-</u>	_
	mg/L	0723	WL	10/20/2004	0001	SE	D	397	F	#	_	_
	mg/L	0729	WL	05/19/2004	0001	SF	D	370	F	#	_	_
	mg/L	0729	WL	10/20/2004	0001	SF	D	293	F	#	<u>-</u>	_
	mg/L	0730	WL	05/19/2004	0001	SE	D	156	F	#	_	_
	mg/L	0730	WL	10/20/2004	0001	SE	D	346	· F	#	_	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT		QUALIFIEF AB DATA		DETECTION LIMIT	UN- CERTAINTY
Alkalinity, Total (As CaCO3	mg/L	0731	WL	05/19/2004	0001	SF	U	859		F	#		_
	mg/L	0731	WL	10/20/2004	0001	SF	U.	774		QF	#	_	_
	mg/L	0735	WL	05/18/2004	0001	SE	D	144		F	#	_	-
	mg/L	0735	WL	10/19/2004	0001	SE ·	D	139		F	#		
	mg/L	0788	WL	10/21/2004	0001	SF	С	377		F	#	_	_
	mg/L	0809	WL	05/18/2004	0001	SF		150		F	#	-	<u>-</u>
	mg/L	0809	WL	10/19/2004	0001	SF		125		F	#	_	_
Manganese	mg/L	0705	WL	05/19/2004	0001	SE	D	0.0021	В	QF	#	0.0011	
	mg/L	0705	WL	10/21/2004	0001	SE	D	0.001	В	QF	#	6.6E-05	
	mg/L	0707	WL	05/19/2004	0001	SF	D	1.900		F	#	0.0023	_
	mg/L	0707	WL	10/21/2004	0001	SF	D	1.500		F	#	6.6E-05	_
	mg/L	0710	WL	05/18/2004	0001	SF	U	0.0011	U	F	#	0.0011	_
	mg/L	0710	WL	10/19/2004	0001	SF	U	0.0015	В	F	#	6.6E-05	_
	mg/L	0716	WL	05/20/2004	0001	SF	0	0.360		F	#	0.0011	_
	mg/L	0716	WL	05/20/2004	N002	SF	О	0.440		F	#	0.0011	_
	mg/L	0716	WL	10/20/2004	0001	SF	0	0.570		F	#	6.6E-05	_
4.	mg/L	0717	WL	05/20/2004	0001	SE	0	0.240		F	#	0.0011	_
	mg/L	0717	WL	10/20/2004	0001	SE	О	0.160		F	#	6.6E-05	_
	mg/L	0718	WL	05/20/2004	0001	SF	D	2.200		F	#	0.0023	_
	mg/L	0718	WL	10/20/2004	0001	SF	D.	1.400		F	#	6.6E-05	_
	mg/L	0719	WL	05/20/2004	0001	SE	D	0.130		QF	#	0.0011	_
	mg/L	0719	WL	10/20/2004	0001	SE	D	0.120		QF	#	6.6E-05	_
	mg/L	0720	WL	05/18/2004	0001	SF	С	0.110		F	#	0.0011	-
	mg/L	0720	WL	10/19/2004	0001	SF	С	0.0039	В	F	#	6.6E-05	_
	mg/L	0721	WL	05/18/2004	0001	SE	С	0.0048	В	F	#	0.0011	_
ı	mg/L	0721	WL	10/19/2004	0001	SE	С	0.003	В	F	#	6.6E-05	_

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	. UNITS	LOCATION ID	LOCATION TYPE	SAMPI DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT		QUALIFIEF B DATA		DETECTION LIMIT	UN- CERTAINTY
Manganese	mg/L	0722	WL	05/20/2004	0001	SF	D	0.460		F	#	0.0011	-
	mg/L	0722	WL	10/20/2004	0001	SF	D	0.190		F	#	6.6E-05	_
	mg/L	0723	WL	05/20/2004	0001	SE	D	0.800		F	#	0.0023	_
	mg/L	0723	WL	10/20/2004	0001	SE	D	0.580		F	#	6.6E-05	_
	mg/L	0729	WL	05/19/2004	0001	SF	D	0.0021	В	F	#	0.0011	-
	mg/L	0729	WL	10/20/2004	0001	SF	D	0.00033	В	UF	#	6.6E-05	_
	mg/L	0729	WL	10/20/2004	0002	SF	D	0.00029	В	UF	#	6.6E-05	_
	mg/L	0730	WL	05/19/2004	0001	SE	D	0.096		F	#	0.0011	
	mg/L	. 0730	WL	10/20/2004	0001	SE	D	0.089		F	#	6.6E-05	-
	mg/L	0731	WL	05/19/2004	0001	SF	U	0.0042	В	F	#	0.0023	-
	mg/L	0731	WL	10/20/2004	0001	SF	U	0.097		QF	#	6.6E-05	_
	mg/L	0735	WL	05/18/2004	0001	SE	D	0.015		F	#	0.0011	_
	mg/L	0735	WL	10/19/2004	0001	SE	D	0.011		F	#	6.6E-05	-
	mg/L	0788	WL	10/21/2004	0001	SF	С	0.047		F	#	6.6E-05	-
	mg/L	0809	WL	05/18/2004	0001	SF		0.410		F	#	0.0011	_
	mg/L	0809	WL	10/19/2004	0001	SF		0.220		F	#	6.6E-05	-
Molybdenum	mg/L	0705	WL	05/19/2004	0001	SE	D	0.0032		QFJ	#	9.3E-05	
	mg/L	0705	WL	10/21/2004	0001	SE	D	0.0031		QF	#	0.00017	_
	mg/L	0707	WL	05/19/2004	0001	SF	D	0.730		FJ	#	0.00093	_
	mg/L	0707	WL	10/21/2004	0001	SF	D	0.730		É	#	0.0017	_
	mg/L	0710	WL	05/18/2004	0001	SF	U	0.0016		UF	#	9.3E-05	_
	mg/L	0710	WL	10/19/2004	0001	SF	U	0.0017		UF	#	0.00017	_
	mg/L	0716	WL	05/20/2004	0001	SF	0	0.180		FJ	#	0.00093	_
	mg/L	0716	WL	05/20/2004	N002	SF	О	0.180		FJ	#	0.00093	_
	mg/L	0716	WL	10/20/2004	0001	SF	0	0.170		F	#	0.0017	_
	mg/L	0717	WL	05/20/2004	0001	SE	0	0.009		FJ	#	9.3E-05	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIER LAB DATA		DETECTION LIMIT	UN- CERTAINTY
Molybdenum	mg/L	0717	WL	10/20/2004	0001	SE	0	0.0078	F	#	0.00017	-
	mg/L	0718	WL	05/20/2004	0001	SF	D	0.094	FJ	#	0.00047	-
	mg/L	0718	WL	10/20/2004	0001	SF	D	0.130	F	#	0.0017	-
	mg/L	0719	WL	05/20/2004	0001	, SE	D	0.016	QFJ	#	9.3E-05	_
	mg/L	0719	WL	10/20/2004	0001	SE	D	0.016	QF	#	0.00017	-
	mg/L	0720	WL	05/18/2004	0001	SF	С	0.0023	FJ	#	9.3E-05	-
	mg/L	0720	WL	10/19/2004	0001	SF	С	0.0018	UF	#	0.00017	-
	mg/L	0721	WL	05/18/2004	0001	SE	С	0.0025	FJ	#	9.3E-05	-
	mg/L	0721	WL	10/19/2004	0001	SE	С	0.0024	F	#	0.00017	_
	mg/L	0722	WL	05/20/2004	0001	SF	D	0.095	FJ	#	0.00047	-
	mg/L	0722	WL	10/20/2004	0001	SF	D	0.085	F	#	0.00017	-
	mg/L	0723	WL	05/20/2004	0001	SE	D	0.00063 B	UF	#	9.3E-05	-
	mg/L	0723	WL	10/20/2004	0001	SE	D	0.0015	UF	#	0.00017	-
	mg/L	0729	WL	05/19/2004	0001	SF	D	0.0027	FJ	#	9.3E-05	-
	mg/L	0729	WL	10/20/2004	0001	SF	D	0.0034	F	#	0.00017	_
	mg/L .	0729	WL	10/20/2004	0002	SF	D	0.0034	F ·	#	0.00017	_
	mg/L	0730	WL	05/19/2004	0001	SE	D	0.0029	FJ	#	9.3E-05	_
	mg/L	0730	WL	10/20/2004	0001	SE	D	0.00062 B	UF	#	0.00017	_
	mg/L	0731	WL	05/19/2004	0001	SF	U	0.120	FJ	#	0.00047	_
	mg/L	0731	WL	10/20/2004	0001	SF	U	0.061	QF	#	0.00017	_
	mg/L	0735	WL	05/18/2004	0001	SE	D	0.0024	UF	#	9.3E-05	-
	mg/L	0735	WL	10/19/2004	0001	SE	D	0.0021	F	#	0.00017	_
	mg/L	0788	WL	10/21/2004	0001	SF	С	0.037	F	#	0.00017	=
	mg/L	0809	WL	05/18/2004	0001	SF		0.0021	UF	#	9.3E-05	_
	mg/L	0809	WL	10/19/2004	0001	SF		0.0013	UF	#	0.00017	-
Oxidation Reduction Potent	mV	0705	WL	05/19/2004	N001	SE	D	190	QF	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUAI LAB [LIFIER DATA		DETECTION LIMIT	UN- CERTAINTY
Oxidation Reduction Potent	mV	0705	WL	10/21/2004	N001	SE	D	220		QF	#	<u> </u>	_
	mV	0707	WL	05/19/2004	N001	SF	D	113		F	#		_
	mV	0707	WL	10/21/2004	N001	SF	D	90		F	#	_	_
	mV	0710	WL	05/18/2004	N001	SF	U	275		F	#	_	_
	mV	0710	WL	10/19/2004	N001	SF	U	153		F	#	-	-
	mV	0716	WL	05/20/2004	N001	SF	О	118		F	#	_	_
	mV	0716	WL	10/20/2004	N001	SF	0	9		F	#	_	_
	mV	0717	WL	05/20/2004	N001	SE	Ο	-127		F	#	_	_
	mV	0717	WL	10/20/2004	N001	SE	О	-129		F	#	_	_
	mV	0718	WL	05/20/2004	N001	SF	D	-159		F	#	_	_
	mV	0718	WL	10/20/2004	N001	SF	D	15		F	#	_	_
	mV -	0719	WL	05/20/2004	N001	SE	D	-81		QF	#	_	_
	mV	0719	WL	10/20/2004	N001	SE	D	-74		QF	#	_	_
	mV	0720	WL	05/18/2004	N001	SF	С	200		F	#	_	<u>.</u>
	mV	0720	WL	10/19/2004	N001	SF	С	95		F	#	_	_
	mV	0721	WL	05/18/2004	N001	SE	С	21		F	#	_	_
	mV	0721	WL	10/19/2004	N001	SE	С	-22		F	#	_	_
	mV	0722	WL	05/20/2004	N001	SF	D	2		F	#	_	_
	mV	0722	WL	10/20/2004	N001	SF	D	57		F	#	_	_
•	mV	0723	WL	05/20/2004	N001	SE	D	-73		F	#	_	_
	mV	0723	WL	10/20/2004	N001	SE	D	-52		F	#	_	_
	mV	0729	WL	05/19/2004	N001	SF	D	239		F	#	_	_
	mV	0729	WL -	10/20/2004	N001	SF	D	115		F	#	_	_
	mV	0730	WL	05/19/2004	N001	SE	D	-150		F	#	_	-
	mV	0730	WL	10/20/2004	N001	SE	D	-145		F	#	_	_
	mV	0731	WL	05/19/2004	N001	SF	U	83		F	#	_	_

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP! DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIER LAB DATA		DETECTION LIMIT	UN- CERTAINTY
Oxidation Reduction Potent	mV	0731	WL	10/20/2004	N001	SF	U	17	QF	#		
	mV	0735	WL	05/18/2004	N001	SE	D	205	F	#	_	_
	mV	0735	WL	10/19/2004	N001	SE	D	152	F	#	_	_
	mV	0788	WL	10/21/2004	N001	SF	С	59	F	#	_	_
	mV	0809	WL	05/18/2004	N001	SF		-206	F	#	<u>.</u>	_
	mV	0809	WL	10/19/2004	N001	SF		119	F	#	_	_
рН	s.u.	0705	WL	05/19/2004	N001	SE	D	8.50	QF	#		
	s.u.	0705	WL	10/21/2004	N001	SE	D	8.26	QF	#	_	_
	s.u.	0707	WL	05/19/2004	N001	SF	D	7.00	F	#	_	_
	s.u.	0707	WL	10/21/2004	N001	SF	D	6.92	F	#	_	_
	s.u.	0710	WL	05/18/2004	N001	SF	U	7.55	F	#	_	_
	s.u.	0710	WL	10/19/2004	N001	SF	U	7.46	F	#	_	. <u>-</u>
	s.u.	0716	WL	05/20/2004	N001	SF	0	7.21	F	#	_	_
	s.u.	0716	WL	10/20/2004	N001	SF	0	7.07	F	#	_	-
	s.u.	0717	WL	05/20/2004	N001	SE	0	7.77	F	#		_
	s.u.	0717	WL	10/20/2004	N001	SE	О	7.69	F	#	-	_
	s.u.	0718	WL	05/20/2004	N001	SF	D	7.25	F	#	_	-
	s.u.	0718	WL	10/20/2004	N001	SF	D	7.04	F	#	_	-
	s.u.	0719	WL	05/20/2004	N001	SE	D	7.64	QF	#	_	_
	s.u.	0719	WL	10/20/2004	N001	SE	D	7.43	QF	#	_	_
	s.u.	0720	WL	05/18/2004	N001	SF	С	7.38	F	#	-	<u>.</u>
	s.u.	0720	WL	10/19/2004	N001	SF	С	7.40	. F	#	-	_
	s.u.	0721	WL	05/18/2004	N001	SE	С	8.96	F	#	_	-
	s.u.	0721	WL	10/19/2004	N001	SE	С	8.84	F	#	-	
	s.u.	0722	WL	05/20/2004	N001	SF	D	6.99	F	#	· -	-
	s.u.	0722	WL	10/20/2004	N001	SF	D	6.92	F	#	-	_

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	ALIFIEF DATA		DETECTION LIMIT	UN- CERTAINTY
рН	s.u.	0723	WL	05/20/2004	N001	SE	D	7.08	F	#		-
	s.u.	0723	WL	10/20/2004	N001	SE	D	6.97	F	#	_	_
	s.u.	0729	WL	05/19/2004	N001	SF	D	7.29	F	#	_	_
	s.u.	0729	WL	10/20/2004	N001	SF	D	7.18	F	#	_	_
	s.u.	0730	WL	05/19/2004	N001	SE	D	7.78	F	#	_	_
	s.u.	0730	WL	10/20/2004	N001	SE	D	7.42	F	#	_	***
	s.u.	0731	WL	05/19/2004	N001	SF	U	8.51	F	#	_	_
	s.u.	0731	WL	10/20/2004	N001	SF	U	7.95	QF	#	_	_
	s.u.	0735	WL	05/18/2004	N001	SE	D	7.67	F	#	_	_
	s.u.	0735	WL	10/19/2004	N001	SE	D	7.54	F	#	_	_
	s.u.	0788	WL	10/21/2004	N001	SF	С	7.26	F	#	-	_
	s.u.	0809	WL	05/18/2004	N001	SF		7.75	F	#	-	_
	s.u.	0809	WL	10/19/2004	N001	SF		7.52	F	#	-	_
Specific Conductance	umhos/cm	0705	WL	05/19/2004	N001	SE	D	1234	QF	#		
	umhos/cm	0705	WL	10/21/2004	N001	SE	D	1319	QF	#	_	-
	umhos/cm	0707	WL	05/19/2004	N001	SF	D	4424	F.	#	_	-
	umhos/cm	0707	WL	10/21/2004	N001	SF	D	4581	F	#	_	-
	umhos/cm	0710	WL	05/18/2004	N001	SF	U	747	· F	#	_	-
	umhos/cm	0710	WL	10/19/2004	N001	SF	U	507	F	#	-	-
	umhos/cm	0716	WL	05/20/2004	N001	SF	0	1631	· F	#	_	-
	umhos/cm	0716	WL	10/20/2004	N001	SF	0	1591	F	#	-	-
	umhos/cm	0717	WL	05/20/2004	N001	SE	0	1989	F	#	_	-
	umhos/cm	0717	WL	10/20/2004	N001	SE	0	1982	F	#	_	_
	umhos/cm	0718	WL	05/20/2004	N001	SF	D	4048	F	#	_	_
	umhos/cm	0718	WL	10/20/2004	N001	SF	D	4525	F	#	<u>-</u>	-
	umhos/cm	0719	WL	05/20/2004	N001	SE	D	1122	QF	#	-	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALI LAB D			DETECTION LIMIT	UN- CERTAINTY
Specific Conductance	umhos/cm	0719	WL	10/20/2004	N001	SE	D	1394	(QF.	#	_	_
	umhos/cm	0720	WL	05/18/2004	N001	SF	С	1700	F	=	#	_	_
	umhos/cm	0720	WL	10/19/2004	N001	SF	С	583	F	=	#	_	
	umhos/cm	0721	WL	05/18/2004	N001	SE	C ·	892	F	=	#	_	_
	umhos/cm	0721	WL	10/19/2004	N001	SE	С	949	F	=	#	-	_
	umhos/cm	0722	WL	05/20/2004	N001	SF	D	2224	F	=	#	_	_
	umhos/cm	0722	WL	10/20/2004	N001	SF	D	1347	F	=	#	_	_
	umhos/cm	0723	WL	05/20/2004	N001	SE	D	4030	F	-	#	-	_
	umhos/cm	0723	WL	10/20/2004	N001	SE	D	4095	F		#	-	-
	umhos/cm	0729	WL	05/19/2004	N001	SF	D	1008	F		#	-	_
	umhos/cm	0729	WL	10/20/2004	N001	SF	D	726	F	:	#	_	-
	umhos/cm	0730	WL	05/19/2004	N001	SE	D	1033	F	:	#	_	_
	umhos/cm	0730	WL	10/20/2004	N001	SE	D	1037	F	:	#	-	-
	umhos/cm	0731	WL	05/19/2004	N001	SF	U	4451	F		#	_	_
	umhos/cm	0731	WL	10/20/2004	N001	SF	U	4973	C)F	#	_	_
	umhos/cm	0735	WL	05/18/2004	N001	SE	D	1668	F		#	_	_
	umhos/cm	0735	WL	10/19/2004	N001	SE	D	1625	F		#	_	_
	umhos/cm	0788	WL	10/21/2004	N001	SF	С	2315	F		#	_	_
	umhos/cm	0809	WL	05/18/2004	N001	SF		781	F		#	_	_
	umhos/cm	0809	WL	10/19/2004	N001	SF		633	F		#	_	_
Sulfate	mg/L	0705	WL	05/19/2004	0001	SE	D	420	C	ıF	#	5	_
	mg/L	0705	WL	10/21/2004	0001	SE	D	450	C	ıF	#	5	_
	mg/L	0707	WL	05/19/2004	0001	SF	D	2500	F		#	25	_
	mg/L	0707	WL	10/21/2004	0001	SF	D	2600	F		#	25	_
•	mg/L	0710	WL	05/18/2004	0001	SF	U	150	F		#	5	_
	mg/L	0710	WL	10/19/2004	0001	SF	U	77	F		#	2.5	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPI DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIER LAB DATA		DETECTION LIMIT	UN- CERTAINT
Sulfate	mg/L	0716	WL	05/20/2004	0001	SF	0	510	F	#	10	_
	mg/L	0716	WL	05/20/2004	N002	SF	О	520	F	#	10	_
	mg/L	0716	WL	10/20/2004	0001	SF	О	530	F F	#	5	_
	mg/L	0717	WL	05/20/2004	0001	SE	0	700	F	#	10	. <u>-</u>
	mg/L	0717	WL	10/20/2004	0001	SE	0	730	F	#	5	_
	mg/L	0718	WL	05/20/2004	0001	SF	D	1800	F	#	25	_
	mg/L	0718	WL.	10/20/2004	0001	SF	D	2100	F	#	25	_
	mg/L`	0719	WL	05/20/2004	0001	SE	D	390	QF	#	5	_
	mg/L	0719	WL	10/20/2004	0001	SE	D	410	QF	#	5	_
	mg/L	0720	WL	05/18/2004	0001	SF	С	600	F	#	10	_
	mg/L	0720	WL	10/19/2004	0001	SF	С	100	F	#	2.5	_
	mg/L	0721	WL	05/18/2004	0001	SE	С	270	F	#	5	_
	mg/L	0721	WL	10/19/2004	0001	SE	С	290	F	#	2.5	_
	mg/L	0722	WL	05/20/2004	0001	SF	D	1000	F	#	10	-
	mg/L	0722	WL	10/20/2004	0001	SF	D	430	F	#	5	_
	mg/L	0723	WL	05/20/2004	0001	SE	D	1900	F	#	25	_
	mg/L	0723	WL	10/20/2004	0001	SE	D	2100	F	#	25	_
	mg/L	0729	WL	05/19/2004	0001	SF	D	150	F	#	5	_
	mg/L	0729	WL	10/20/2004	0001	SF	D	86	F	#	2.5	_
	mg/L	0729	WL	10/20/2004	0002	SF	D	86	F	#	2.5	-
	mg/L	0730	WL	05/19/2004	0001	SE	D	300	F	#	5	_
	mg/L	0730	WL	10/20/2004	0001	SE	D	190	F	#	5	_
	mg/L	0731	WL	05/19/2004	0001	SF	U	1500	F	#	25	_
	mg/L	0731	WL	10/20/2004	0001	SF	U	1700	QF	#	25	_
	mg/L	0735	WL	05/18/2004	0001	SE	D	610	F	#	10	-
	mg/L	0735	WL	10/19/2004	0001	SE	D	630	F	#	5	_

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIER LAB DATA		DETECTION LIMIT	UN- CERTAINT
Sulfate	mg/L	0788	WL	10/21/2004	0001	SF	С	850	F	#	10	_
	mg/L	0809	WL	05/18/2004	0001	SF		210	F	#	5	-
	mg/L	0809	WL	10/19/2004	0001	SF		180	F	#	2.5	_
Temperature	С	0705	WL	05/19/2004	N001	SE	D	13.5	QF	#	_	-
	С	0705	WL	10/21/2004	N001	SE	D	10.47	QF	#	_	_
	С	0707	WL	05/19/2004	N001	SF	D	10.1	F	#	_	_
	С	0707	WL	10/21/2004	N001	SF	D	11.85	F .	#	-	
	С	0710	WL	05/18/2004	N001	SF	U	7.4	F	#	_	_
	С	0710	WL	10/19/2004	N001	SF	U	12.42	F	#	-	_
	С	0716	WL	05/20/2004	N001	SF	0	8.9	F	#	_	_
	С	0716	WL	10/20/2004	N001	SF	0	14.59	F	#	-	_
	С	0717	WL	05/20/2004	N001	SE	0	10.3	F	#	•	_
	С	0717	WL	10/20/2004	N001	SE	0	14.05	F	#	-	_
	С	0718	WL	05/20/2004	N001	SF	D	11.3	F	#	-	_
	С	0718	WL	10/20/2004	N001	SF	D	15.00	F	#	-	_
	С	0719	WL	05/20/2004	N001	SE	D	12.0	QF	#	-	_
	С	0719	WL	10/20/2004	N001	SE	D	14.15	QF	#	-	_
	С	0720	WL	05/18/2004	N001	SF	С	9.7	F	#	_	-
	С	0720	WL	10/19/2004	N001	SF	С	13.30	F	#	_	_
	С	0721	WL	05/18/2004	N001	SE	С	10.9	F	#	_	-
	С	0721	WL	10/19/2004	N001	SE	С	12.59	, F	#	_	-
	С	0722	WL	05/20/2004	N001	SF	D	10.8	F	#		_
	C	0722	WL	10/20/2004	N001	SF	D	14.53	F	#	-	
	С	0723	WL	05/20/2004	N001	SE	D	12.0	F	#	-	-
	С	0723	WL	10/20/2004	N001	SE	D	11.51	F	#	-	-
	С	0729	WL	05/19/2004	N001	SF	D	9.2	F	#	-	_

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPI DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIER LAB DATA		DETECTION LIMIT	UN- CERTAINTY
Temperature	С	0729	WL	10/20/2004	N001	SF	D	14.14	F	#	_	_
	С	0730	WL	05/19/2004	N001	SE	D	11.4	F	#	-	-
	С	0730	WL	10/20/2004	N001	SE	D	13.43	F	#	_	-
	С	0731	WL	05/19/2004	N001	SF	U	11.9	F	#	_	_
	С	0731	WL	10/20/2004	N001	SF	U	15.90	QF	#	_	_
	С	0735	WL	05/18/2004	N001	SE	D	8.61	F	#	-	_
	С	0735	WL	10/19/2004	N001	SE	D	12.19	F	#	_	_
	С	0788	WL	10/21/2004	N001	SF	C .	11.33	F	#	-	=
	С	0809	WL	05/18/2004	N001	SF		7.04	F	#	_	_
	С	0809	WL.	10/19/2004	N001	SF		13.64	F	#	-	-
Turbidity	NTU	0705	WL	05/19/2004	N001	SE	D	0.80	QF	#	-	
	NTU	0705	WL	10/21/2004	N001	SE	D	0.89	QF	#	_	_
	NTU	0707	WL	05/19/2004	N001	SF	Ð	1.15	F	#	_	_
	NTU	0707	WL	10/21/2004	N001	SF	D	1.14	F	#	_	_
	NTU	0710	WL	05/18/2004	N001	SF	U	1.59	F	#	_	_
	NTU	0710	WL	10/19/2004	N001	SF	U	0.50	F	#	_	_
	NTU	0716	WL	05/20/2004	N001	SF	0	4.89	F	#	-	_
	NTU	0716	WL	10/20/2004	N001	SF	0	8.02	F	#	-	_
	NTU	0717	WL	05/20/2004	N001	SE	0	0.83	F	#	_	_
	NTU	0717	WL	10/20/2004	N001	SE	0	1.10	F	#	_	_
	NTU	0718	WL	05/20/2004	N001	SF	D	6.78	F	#	-	-
	NTU	0718	WL	10/20/2004	N001	SF	D	3.49	F	#	-	_
	NTU	0719	WL	05/20/2004	N001	SE	D	2.66	QF	#	_	_
	NTU	0719	WL	10/20/2004	N001	SE	D	5.89	QF	#	_	-
	NTU	0720	WL	05/18/2004	N001	SF	С	3.72	F	#	_	_
	NTU	0720	WL	10/19/2004	N001	SF	С	1.00	F	#	-	_

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUAL LAB E	-IFIER DATA		DETECTION LIMIT	UN- CERTAINTY
Turbidity	NTU	0721	WL	05/18/2004	N001	SE	С	3.96		F	#	_	_
	NTU	0721	WL	10/19/2004	N001	SE	С	0.96		F	#	-	_
	NTU	0722	WL	05/20/2004	N001	SF	D	8.16		F	#	_	_
	NTU	0722	WL	10/20/2004	N001	SF	D	8.22		F	#	_	-
	NTU	0723	WL	05/20/2004	N001	SE	D	1.77		F	#	_	_
	NTU	0723	WL	10/20/2004	N001	SE	D	1.12		F	#	_	_
	NTU	0729	WL	05/19/2004	N001	SF	D	4.38		F	#	-	_
	NTU	0729	WL	10/20/2004	N001	SF	D	0.64		F	#	-	-
	NTU	0730	WL	05/19/2004	N001	SE	D	6.67		F	#	_	_
	NTU	0730	WL	10/20/2004	N001	SE	D	5.07		F	#	-	-
	NTU	0731	WL	05/19/2004	N001	SF	U	2.28		F	#	_	· "
	NTU	0731	WL	10/20/2004	N001	SF	U	1.51		QF	#	_	_
	NTU	0735	WL	05/18/2004	N001	SE	D	1.58		F	#	_	-
	NTU	0735	WL	10/19/2004	N001	SE	D	1.59	i	F	#	-	_
	NTU	0788	WL	10/21/2004	N001	SF	С	3.21		F	#	_	_
	NTU	0809	WL	05/18/2004	N001	SF		3.83	1	F	#	<u>-</u>	-
	NTU	0809	WL	10/19/2004	N001	SF		6.44	1	F	#	_	_
Jranium	mg/L	0705	WL	05/19/2004	0001	SE	D	0.0002		UQF	#	2.8E-06	-
	mg/L	0705	WL	10/21/2004	0001	SE	D	0.00017	ı	UQF	#	8.3E-06	_
	mg/L	0707	WL	05/19/2004	0001	SF	D	0.970	ı	F	#	2.8E-05	-
	mg/L	0707	WL	10/21/2004	0001	SF	D	0.900	ı	F	#	8.3E-05	_
	mg/L	0710	WL	05/18/2004	0001	SF	U	0.005		=	#	2.8E-06	_
	mg/L	0710	WL	10/19/2004	0001	SF	U	0.0022	F	=	#	8.3E-06	_
	mg/L	0716	WL	05/20/2004	0001	SF	0	0.320	F	=	#	2.8E-05	_
	mg/L	0716	WL	05/20/2004	N002	SF	О	0.310	· F		#	2.8E-05	_
	mg/L	0716	WL	10/20/2004	0001	SF	0	0.340	F	=	#	8.3E-05	_

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIEF LAB DATA		DETECTION LIMIT	UN- CERTAINT
Uranium	mg/L	0717	WL	05/20/2004	0001	SE	0	0.00013	UF	#	2.8E-06	_
	mg/L	0717	WL	10/20/2004	0001	SE	O	0.00052	F	#	8.3E-06	_
	mg/L	0718	WL	05/20/2004	0001	SF	D	0.210	F	#	1.4E-05	-
	mg/L	0718	WL	10/20/2004	0001	SF	D	0.250	F	#	8.3E-05	_
	mg/L	0719	WL	05/20/2004	0001	SE	D	0.00049	QF	#	2.8E-06	_
	mg/L	0719	WL	10/20/2004	0001	SE	D	0.00064	QF	#	8.3E-06	_
	mg/L	0720	WL	05/18/2004	0001	SF	С	0.011	F	#	2.8E-06	_
	mg/L	0720	WL	10/19/2004	0001	SF	С	0.0029	E F	#	8.3E-06	_
	mg/L	0721	WL	05/18/2004	0001	SE	С	0.00007	B UF	#	2.8E-06	-
	mg/L	0721	WL	10/19/2004	0001	SE	С	0.00007	B UF	#	8.3E-06	_
	mg/L	0722	WL	05/20/2004	0001	SF	D	0.870	F	#	2.8E-05	· -
	mg/L	0722	WL	10/20/2004	0001	SF	D	0.410	F	#	8.3E-05	-
	mg/L	0723	WL	05/20/2004	0001	SE	D	0.00006	B UF	#	2.8E-06	~
	mg/L	0723	WL	10/20/2004	0001	SE	D	0.00061	F	#	8.3E-06	_
	mg/L	0729	WL	05/19/2004	0001	SF	D	0.017	F	#	2.8E-06	_
	mg/L	0729	WL	10/20/2004	0001	SF	D	0.0075	F	#	8.3E-06	_
	mg/L	0729	WL	10/20/2004	0002	SF	D	0.0073	F	#	8.3E-06	_
	mg/L	0730	WL	05/19/2004	0001	SE	D	0.00039	F	#	2.8E-06	_
	mg/L	0730	WL	10/20/2004	0001	SE	D	0.0036	F	#	8.3E-06	_
	mg/L	0731	WL	05/19/2004	0001	SF	U	0.014	F	#	1.4E-05	_
	mg/L	0731	WL	10/20/2004	0001	SF	U	0.0075	QF	#	8.3E-06	_
	mg/L	0735	WL	05/18/2004	0001	SE	D	0.00035	F	#	2.8E-06	_
	mg/L	0735	WL	10/19/2004	0001	SE	D	0.00036	F	#	8.3E-06	_
	mg/L	0788	WL	10/21/2004	0001	SF	С	0.041	F	#	8.3E-06	_
	mg/L	0809	WL	05/18/2004	0001	SF		0.0041	F	#	2.8E-06	_
	mg/L	0809	WL	10/19/2004	0001	SF		0.0026	F	#	8.3E-06	

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:25 am

					· · · · · · · · · · · · · · · · · · ·							
PAF	RAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPLE DATE	:: ZONE		RESULT		JALIFIERS: DATA QA	DETECTION LIMIT	UN- CERTAINTY
REC	ORDS: SELECTE data_valid	D FROM USEE200 ation_qualifiers NOT	WHERE site_cod	le='RVT01' AND o	quality_assurance	= TRUE AND (da	ta_validation_o	qualifiers IS NUL	L OR data	a_validation_qu	ualifiers NOT LIKE '9	
SAM	PLE ID CODES: (000X = Filtered samp	ple (0.45 µm). N	00X = Unfiltered	sample. X = rep	licate number.	225 5011100	it nor treothe and	aπ11/1/2	J04#		
	ATION TYPES: W											
ZON	ES OF COMPLETIC	ON:										
S	E SEMICONFIN	ED SANDSTONE		SF	SURFICIAL							
FLOV	W CODES: C	CROSS GRADIENT	D DOWN	GRADIENT	O ON-SITE	U	UPGRADIEN'	т				
	QUALIFIERS:				0.1.01.12	J	OI OINADILII					
*	Replicate analysis	s not within control lir	mits.									
+	Correlation coeffic	cient for MSA < 0.995	5.									
>	Result above upp											
Α		d aldol-condensation										
В	Inorganic: Result	is between the IDL a	and CRDL. Organ	nic: Analyte also	found in method b	olank.						
С		onfirmed by GC-MS.										
D		ed in diluted sample.										
E	Inorganic: Estima	te value because of	interference, see	case narrative. C	Organic: Analyte e	exceeded calibrati	on range of the	GC-MS.				
Н	Holding time expir	ed, value suspect.					_					
!		on limit due to require	ed dilution.									
J	Estimated						•					
M		jection precision not										
N	Inorganic or radio	chemical: Spike sam	nple recovery not	within control limi	ts. Organic: Tent	tatively identified o	ompund (TIC).					
P	> 25% difference i	n detected pesticide	or Arochlor conce	entrations betwee	n 2 columns.							
S	Result determined	by method of standa	ard addition (MSA	s) .								
U		elow detection limit.										
W X	Laboratory defines	ke outside control lim	nits while sample	absorbance < 50°	% of analytical spi	ke absorbance.						
Ŷ	Laboratory defined	(USEPA CLP organ	nic) qualifier, see	case narrative.								
Z	Laboratory defined	(USEPA CLP organ	nic) qualifier, see	case narrative.								
		l (USEPA CLP orgar	nic) qualifier, see	case narrative.								
	QUALIFIERS:											
F	Low flow sampling				grout contaminati			J Estimated	value.			
L	Less than 3 bore v	olumes purged prior	to sampling.			ampling technique		R Unusable r	esult.			
U		ed for but was not de		X Location	is undefined.							
$\cap \Delta \cap I$	HALIEIER: # - val	idated according to (Ouglitur A agrees									

Appendix B

Domestic Well Data

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:22 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT		UALIFIE B DATA		DETECTION LIMIT	UN- CERTAINT
Alkalinity, Total (As CaCO3	mg/L	0405	WL	10/20/2004	N001	NR	Ν .	90			#		-
	mg/L	0411	WL	10/21/2004	N001	NR	N	110			#	_	_
	mg/L	0430	WL	10/21/2004	N001	NR	N	159			#	_	_
	mg/L	0436	WL	10/21/2004	N001	NR	N	158			#	_	_
	mg/L	0446	WL	10/21/2004	N001	NR	N	155			#	_	_
	mg/L	0454	WL	10/19/2004	N001			140			#	_	-
	mg/L	0460	WL	10/20/2004	N001	NR	N	167			#	_	-
	mg/L	0828	WL	10/21/2004	N001		0	158			#	- -	- -
Manganese	mg/L	0405	WL	10/20/2004	N001	NR	N	0.0033	В		#	6.6E-05	-
	mg/L	0411	WL	10/21/2004	N001	NR	N	0.0061			#	6.6E-05	_
	mg/L	0430	WL	10/21/2004	N001	ЙR	N	0.0054			#	6.6E-05	_
	mg/L	0436	WL	10/21/2004	N001	NR	Ń	0.002	В		#	6.6E-05	_
	mg/L	0446	WL	10/21/2004	N001	NR	N	0.002	В		#	6.6E-05	_
	mg/L	0446	WĻ	10/21/2004	N002	NR	N	0.0017	В		#	6.6E-05	- ,
	mg/L	0454	WL	10/19/2004	N001			0.0076			#	6.6E-05	
	mg/L	0460	WL	10/20/2004	N001	NR	N	0.0036	BE		#	6.6E-05	-
	mg/L	0828	WL	10/21/2004	N001		0	0.0011	В	U	#	6.6E-05	-
Molybdenum	mg/L	0405	WL	10/20/2004	N001	NR	N	0.0027	-,	J	#	0.00017	_
	mg/L	0411	WL	10/21/2004	N001	NR	N	0.0015		J	#	0.00017	_
	mg/L	0430	WL	10/21/2004	N001	NR	N	0.0018		j	#	0.00017	_
	mg/L	0436	WL	10/21/2004	N001	NR	N	0.0024		J	#	0.00017	_
	mg/L	0446	WL	10/21/2004	N001	NR	N	0.0019		J	#	0.00017	<u>-</u>
I	mg/L	0446	WL	10/21/2004	N002	NR	N	0.0023		J	#	0.00017	_
·	mg/L	0454	WL	10/19/2004	N001			0.0016		-	#	0.00017	-
ı	mg/L	0460	WL	10/20/2004	N001	NR	N	0.0022		J	#	0.00017	-
1	ng/L	0828	WL	10/21/2004	N001		0	0.0023		J	#	0.00017	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:22 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN- CERTAINTY
Oxidation Reduction Potent	mV	0405	WL	10/20/2004	N001	NR	N	-82	#	-	-
	mV	0411	WL	10/21/2004	N001	NR	N	66	#	_	_
	mV .	0430	WL	10/21/2004	N001	NR	N	87	#	-	_
	mV	0436	WL	10/21/2004	N001	NR	N	146	#	_	•
	mV	0446	WL	10/21/2004	N001	NR	N	72	#	_	_
	mV	0454	WL	10/19/2004	N001			169	#	_	_
	mV	0460	WL	10/20/2004	N001	NR	N	-31	#	_	_
	mV	0828	WL	10/21/2004	N001		О	146	#		_
pH	s.u.	0405	WL	10/20/2004	N001	NR	N	8.91	#	•	
	s.u.	0411	WL	10/21/2004	N001	NR	N	8.88	#	_	_
	s.u.	0430	WL	10/21/2004	N001	NR	Ν	8.92	#	_	_
	s.u.	0436	WL	10/21/2004	N001	NR	N	8.51	#	-	_
	s.u.	0446	WL	10/21/2004	N001	NR	N	9.08	#	_	_
	s.u.	0454	WL	10/19/2004	N001			8.06	#	_	_
	s.u.	0460	WL	10/20/2004	N001	NR	N	8.89	#	_	_
	s.u.	0828	WL	10/21/2004	N001		0	9.00	#	_	-
Specific Conductance	umhos/cm	0405	WL	10/20/2004	N001	NR	N	954	#	_	_
	umhos/cm	0411	WL	10/21/2004	N001	NR	N	968	#	_	_
	umhos/cm	0430	WL	10/21/2004	N001	NR	N	787	#	_	
	umhos/cm	0436	WL	10/21/2004	N001	NR	N	785	#	_	_
	umhos/cm	0446	WL	10/21/2004	N001	NR	N	689	#	_	_
	umhos/cm	0454	WL	10/19/2004	N001			1345	#	_	_
	umhos/cm	0460	WL	10/20/2004	N001	NR	N	729	#	-	_
	umhos/cm	0828	WL	10/21/2004	N001		0	808	#	_	-
Sulfate	mg/L	0405	WL	10/20/2004	N001	NR	N	300	#	5	_
	mg/L	0411	WL	10/21/2004	N001	NR	N	310	#	5	

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:22 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMP DATE	LE: ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIER LAB DATA		DETECTION LIMIT	UN- CERTAINTY
Sulfate	mg/L	0430	WL	10/21/2004	N001	NR	N	200		#	2.5	_
	mg/L	0436	WL	10/21/2004	N001	NR	N	200		#	2.5	-
	mg/L	0446	WL	10/21/2004	N001	NR	N	150		#	2.5	_
	mg/L	0446	WL	10/21/2004	N002	NR	Ν	150		#	2.5	-
	mg/L	0454	WL	10/19/2004	N001			480		#	5	-
	mg/L	0460	WL	10/20/2004	N001	NR	N	170		#	2.5	-
	mg/L	0828	WL	10/21/2004	N001		О	200		#	2.5	_
Temperature	С	0405	WL	10/20/2004	N001	NR	N	12.60		#		_
	С	0411	WL	10/21/2004	N001	NR	N	13.62		#	_	_
•	С	0430	WL	10/21/2004	N001	NR	N	15.17		#	_	_
	С	0436	WL	10/21/2004	N001	NR	N	16.53		#	_	_
	С	0446	WL	10/21/2004	N001	NR	N	12.45		#	_	_
	С	0454	WL	10/19/2004	N001			12.49		#	_	<u>-</u>
	С	0460	WL	10/20/2004	N001	NR	N	22.57		#	_	_
	С	0828	WL	10/21/2004	N001		О	14.82		#	<u>-</u>	-
Turbidity	NTU	0405	WL	10/20/2004	N001	NR	N	2.07		#		
	NTU	0411	WL	10/21/2004	N001	NR	N	3.34		#	_	_
	NTU	0430	WL	10/21/2004	N001	NR	N	1.37		#	_	_
	NTU	0436	WL	10/21/2004	N001	NR	N	1.65		#	_	
	NTU	0446	WL	10/21/2004	N001	NR	N	2.15		#		-
	NTU	0454	WL	10/19/2004	N001			0.57		#	_	-
	NTU	0460	WL	10/20/2004	N001	NR	N	1.14		#	_	-
·	NTU	0828	WL	10/21/2004	N001		0	0.64		#	_	<u>-</u>
Jranium	mg/L	0405	WL	10/20/2004	N001	NR	N	0.00005 E	3 U	#	8.3E-06	
	mg/L	0411	WL	10/21/2004	N001	NR	N	0.00005 E		#	8.3E-06	-
	mg/L	0430	WL	10/21/2004	N001	NR	N	0.00003 E	-	#	8.3E-06	-

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:22 am

PARAMETER	UNITS	LOCATION ID	LOCATION TYPE	SAMPI DATE	LE; ID	ZONE COMPL	FLOW REL.	RESULT		ALIFIEF DATA		DETECTION LIMIT	UN- CERTAINTY
Uranium	mg/L	0436	WL	10/21/2004	N001	NR	N	0.00006	В	U	#	8.3E-06	_
	mg/L	0446	WL	10/21/2004	N001	NR	N	0.00004	В	U	#	8.3E-06	-
	mg/L	0446	WL	10/21/2004	N002	NR	N	0.00005	В	U	#	8.3E-06	_
	mg/L	0454	WL	10/19/2004	N001			0.00004	В	U	#	8.3E-06	_
	mg/L	0460	WL	10/20/2004	N001	NR	N	0.00006	В	U	#	8.3E-06	-
	mg/L	0828	WL	10/21/2004	N001		0	0.00006	В	U	#	8.3E-06	_

CLASSIC GROUND WATER QUALITY DATA BY PARAMETER WITH ZONE (USEE201) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:22 am

QA QUALIFIER: # = validated according to Quality Assurance guidelines.

PARAMETER	LOCATION UNITS ID	LOCATION TYPE	SAMPLE: DATE ID	ZONE COMPL	FLOW REL.	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN- CERTAINTY
RECORDS: SELEC (data_v #11/1/2	CTED FROM USEE200 WHERE site_co validation_qualifiers IS NULL OR data_v 2004#	de='RVT01' AND la alidation_qualifiers	ocation_code in('0405','0 NOT LIKE '%R%' AND	0411','0430','0 data_valida	04361 104461 1	045411046011000	NI AND "		
SAMPLE ID CODES:	000X = Filtered sample (0.45 μm).	NOOX = Unfiltered s	sample. X = replicate n	umher					
LOCATION TYPES:			, and the second second	arribor.					
ZONES OF COMPLE									
	VERY OF DATA FOR CLASSIFYING								
FLOW CODES: N		TE							
	I UNKNOWN O ON-SI	IE							
LAB QUALIFIERS:									
	ysis not within control limits. efficient for MSA < 0.995.								
	upper detection limit.								
	cted aldol-condensation product.								
	sult is between the IDL and CRDL. Orga	nic. Analyte also t	ound in mothed blank						
C Pesticide resul	It confirmed by GC-MS.	ino. Analyte also i	ound in metriod blank.						
	nined in diluted sample.								
	imate value because of interference, see	e case narrative. C	rganic: Analyte exceeds	ed calibration	range of the	CC MS			
H Holding time e	xpired, value suspect.		- garner 7 maryte execest	ca canbration	rrange or the	GC-IVIS.			
I Increased determined	ection limit due to required dilution.								
J Estimated									
	e injection precision not met.								
N Inorganic or ra	diochemical: Spike sample recovery not	within control limit	s. Organic: Tentatively	identified co	mpund (TIC)				*
P > 25% differen	ce in detected pesticide or Arochlor cond	centrations between	n 2 columns.		, , ,				
	ned by method of standard addition (MS	A).							
	It below detection limit.								
W Post-digestion X Laboratory defi	spike outside control limits while sample	absorbance < 50%	% of analytical spike abs	orbance.					
Y Laboratory defi	ned (USEPA CLP organic) qualifier, see	case narrative.							
Z Laboratory defi	ned (USEPA CLP organic) qualifier, see	case narrative.							
	ned (USEPA CLP organic) qualifier, see	case narrative.							
DATA QUALIFIERS:	P								
	ling method used.		grout contamination, pH			J Estimated	value.		
	re volumes purged prior to sampling. Ivzed for but was not detected		e result due to sampling	j technique		R Unusable r	esult.		

Appendix C

Surface Water Quality Data

PARAMETER	UNITS	LOCATIO ID	N SAMPL DATE	E: ID	RESULT	QUALI LAB DA	S: [QA	DETECTION LIMIT	UN- CERTAINT
Alkalinity, Total (As CaCO3	mg/L	0747	05/20/2004	0001	352		#	-	-
	mg/L	0747	10/21/2004	0001	318		#	-	-
	mg/L	0749	05/20/2004	0001	451		#	-	-
	mg/L	0749	10/20/2004	0001	450		#	-	-
	mg/L	0794	05/19/2004	0001	101		#	-	-
	mg/L	0794	10/19/2004	0001	137		#	-	-
	mg/L	0796	05/20/2004	0001	84		#	-	-
	mg/L	0796	10/19/2004	0001	140		#	-	-
	mg/L	0810	05/18/2004	0001	293		#	-	-
	mg/L	0810	10/20/2004	0001	345		#	_	-
	mg/L	0811	05/19/2004	0001	91		#	_	-
	mg/L	0811	10/21/2004	0001	118		#	_	-
	mg/L	0812	05/20/2004	0001	84		#	_	_
	mg/L	0812	10/21/2004	0001	108		#	_	_
	mg/L	0822	05/18/2004	0001	344		#	_	-
	mg/L	0822	10/19/2004	0001	430		#	-	_
	mg/L	0823	10/19/2004	0001	117		#	_	-
Manganese	mg/L	0747	05/20/2004	0001	2.100		 #	0.0011	-
	mg/L	0747	05/20/2004	N002	2.200		#	0.0011	-
	mg/L	0747	10/21/2004	0001	0.510		#	6.6E-05	_
	mg/L	0749	05/20/2004	0001	0.014		#	0.0023	_
	mg/L	0749	10/20/2004	0001	0.020		#	6.6E-05	_
	mg/L	0794	05/19/2004	0001	0.014		#	0.0011	_
	mg/L	0794	10/19/2004	0001	0.0079		#	6.6E-05	_
	mg/L	0796	05/20/2004	0001	0.010		#	0.0011	
	mg/L	0796	10/19/2004	0001	0.008		#	6.6E-05	
•	mg/L	0810	05/18/2004	0001	0.038		#	0.0011	_
	mg/L	0810	10/20/2004		0.099		#	6.6E-05	_
	mg/L		05/19/2004		0.021		#	0.0011	-
	mg/L	0811	10/21/2004	0001	0.0096		#	6.6E-05	_
	mg/L		05/20/2004		0.012 N	J	#	0.0011	-
	mg/L		10/21/2004		0.0093	Ü	#	6.6E-05	-
	mg/L		05/18/2004		0.032		#	0.0023	<u>-</u>
	mg/L		10/19/2004		0.048		#		-
	mg/L		10/19/2004		0.0019 B		#	6.6E-05 6.6E-05	-
-	mg/L		05/20/2004				 		-
-	mg/L		05/20/2004		0.032	J	#	9.3E-05	-
					0.031	J	#	9.3E-05	-
1	mg/L	0747	10/21/2004	UUU1	0.014		#	0.00017	-

PARAMETER	UNITS	LOCATION	N SAMPL DATE	.E: ID	RESULT		LIFIEF DATA		ETECTION LIMIT	UN- CERTAINT
Molybdenum	mg/L	0749	05/20/2004	0001	0.0073		J	#	9.3E-05	-
	mg/L	0749	10/20/2004	0001	0.011			#	0.00017	-
	mg/L	0794	05/19/2004	0001	0.0008 E	3	U	#	9.3E-05	-
	mg/L	0794	10/19/2004	0001	0.001		U	#	0.00017	-
	mg/L	0796	05/20/2004	0001	0.0008 E	3	U	#	9.3E-05	-
	mg/L	0796	10/19/2004	0001	0.0011		U	#	0.00017	-
	mg/L	0810	05/18/2004	0001	0.0018		U	#	9.3E-05	-
	mg/L	0810	10/20/2004	0001	0.0015		U	#	0.00017	-
	mg/L	0811	05/19/2004	0001	0.0009 E	3	U	#	9.3E-05	-
	mg/L	0811	10/21/2004	0001	0.001		U	#	0.00017	-
	mg/L	0812	05/20/2004	0001	0.0008 E	3	U	#	9.3E-05	-
	mg/L	0812	10/21/2004	0001	0.0012		U	#	0.00017	-
	mg/L	0822	05/18/2004	0001	0.0048		J	#	9.3E-05	-
	mg/L	0822	10/19/2004	0001	0.0034			#	0.00017	-
	mg/L	0823	10/19/2004	0001	0.0028			#	0.00017	=
Oxidation Reduction Potent	mV	0747	05/20/2004	N001	41			#	-	_
	mV	0747	10/21/2004	N001	15.6			#	-	-
	mV	0749	05/20/2004	N001	41			#	-	-
	mV	0749	10/20/2004	N001	19			#	-	_
·	mV .	0794	05/19/2004	N001	213			#	-	-
	mV	0794	10/19/2004	N001	114			#	_	-
	mV	0796	05/20/2004	N001	73			#	-	-
	mV	0796	10/19/2004	N001	179			#	-	-
	mV	0810	05/18/2004	N001	202			#	_	_
	mV	0810	10/20/2004	N001	71.9			#	_	-
	mV	0811	05/19/2004	N001	187			#	-	_
	mV	0811	10/21/2004	N001	87			#	_	-
	mV	0812	05/20/2004	N001	70			#	_	_
	mV	0812	10/21/2004	N001	93			#	_	-
	mV	0822	05/18/2004	N001	144			#	_	-
	mV	0822	10/19/2004	N001	121			#	_	-
	mV	0823	10/19/2004	N001	142			#	-	-
ρΗ	s.u.	0747	05/20/2004	N001	6.91			#	-	-
	s.u.	0747	10/21/2004	N001	7.93			#	_	-
	s.u.	0749	05/20/2004	N001	7.13			#	_	-
	s.u.	0749	10/20/2004	N001	8.18			#	_	-
	s.u.		05/19/2004		8.46			#	- .	-
	s.u.		10/19/2004		8.41			#		

PARAMETER	UNITS	OCATIC ID	ON SAMPL DATE	E: ID	RESULT	QUALIFIERS: D LAB DATA QA	ETECTION LIMIT	UN- CERTAINT
рН	s.u.	0796	05/20/2004	N001	8.33	#	-	-
	s.u.	0796	10/19/2004	N001	7.27	#	-	=
	s.u.	0810	05/18/2004	N001	9.02	#	-	-
	s.u.	0810	10/20/2004	N001	8.49	#	-	-
	s.u.	0811	05/19/2004	N001	8.41	#	_	-
	s.u.	0811	10/21/2004	N001	8.53	#	-	-
	s.u.	0812	05/20/2004	N001	8.28	#	_	-
	s.u.	0812	10/21/2004	N001	8.56	#	-	-
	s.u.	0822	05/18/2004	N001	7.87	#	-	-
	s.u.	0822	10/19/2004	N001	8.29	#	-	-
	s.u.	0823	10/19/2004	N001	8.25	#	-	-
Specific Conductance	umhos/cm	0747	05/20/2004	N001	1442	#	-	_
	umhos/cm	0747	10/21/2004	N001	1720	#	-	-
	umhos/cm	0749	05/20/2004	N001	5320	#	_	-
	umhos/cm	0749	10/20/2004	N001	5894	#	_	-
	umhos/cm	0794	05/19/2004	N001	406	#	-	-
	umhos/cm	0794	10/19/2004	N001	641	#	-	_
	umhos/cm	0796	05/20/2004	N001	366	#	_	_
	umhos/cm	0796	10/19/2004	N001	634	#	-	-
	umhos/cm	0810	05/18/2004	N001	1116	#	-	-
	umhos/cm	0810	10/20/2004	N001	1302	#	-	_
	umhos/cm	0811	05/19/2004	N001	410	#	_	-
	umhos/cm	0811	10/21/2004	N001	595	#	-	-
	umhos/cm	0812	05/20/2004	N001	326	#	_	-
	umhos/cm	0812	10/21/2004	N001	581	#	-	-
	umhos/cm	0822	05/18/2004	N001	3734	#	-	_
	umhos/cm	0822	10/19/2004	N001	1606	#	-	-
	umhos/cm	0823	10/19/2004	N001	805	#	-	-
Sulfate	mg/L	0747	05/20/2004	0001	670	#	10	
	mg/L	0747	05/20/2004	N002	660	#	10	-
	mg/L	0747	10/21/2004	0001	510	# .	5	-
	mg/L	0749	05/20/2004	0001	2300	#	25	-
	mg/L	0749	10/20/2004	0001	2600	#	100	-
	mg/L	0794	05/19/2004	0001	98	#	2.5	-
	mg/L	0794	10/19/2004	0001	190	#	2.5	-
	mg/L	0796	05/20/2004	0001	83	#	2.5	_
	mg/L	0796	10/19/2004	0001	180	#	2.5	-
	mg/L	0810	05/18/2004	0001	290	#	5	

PARAMETER	UNITS	LOCATIO ID	N SAMPL DATE	E: ID	RESULT	QUALIFIERS: D LAB DATA QA	ETECTION LIMIT	UN- CERTAINT
Sulfate	mg/L	0810	10/20/2004	0001	380	#	5	-
	mg/L	0811	05/19/2004	0001	97	#	2.5	-
	mg/L	0811	10/21/2004	0001	170	#	2.5	-
	mg/L	0812	05/20/2004	0001	84	#	2.5	-
	mg/L	0812	10/21/2004	0001	170	#	2.5	=
	mg/L	0822	05/18/2004	0001	1500	#	25	-
	mg/L	0822	10/19/2004	0001	1200	#	10	-
	mg/L	0823	10/19/2004	0001	560	#	5	-
Temperature	С	0747	05/20/2004	N001	14.3	#	-	-
	С	0747	10/21/2004	N001	12.11	#	_	_
	С	0749	05/20/2004	N001	24.7	#	_	-
	С	0749	10/20/2004	N001	20.59	#	_	_
	С	0794	05/19/2004	N001	20.1	#	-	_
	С	0794	10/19/2004	N001	10.07	#	_	_
	С	0796	05/20/2004	N001	16.9	#	_	_
	С	0796	10/19/2004	N001	5.40	#	_	_
	С	0810	05/18/2004	N001	20.5	#	_	_
	С	0810	10/20/2004	N001	7.96	#	_	_
	С	0811	05/19/2004	N001	19.7	#	_	_
	С	0811	10/21/2004	N001	11.00	#	-	_
	С	0812	05/20/2004	N001	17.8	#	_	-
	С	0812	10/21/2004	N001	11.04	#	-	_
	С	0822	05/18/2004	N001	24.6	#	_	-
	С	0822	10/19/2004	N001	11.32	#	-	_
	С	0823	10/19/2004	N001	10.72	#	_	_
Turbidity	NTU	0747	05/20/2004	N001	74.3	#		_
	NTU	0747	10/21/2004	N001	226	#	-	_
	NTU	0749	05/20/2004		7.81	<i>"</i> #	, _	_
	NTU	0749	10/20/2004		39.0	#	_	_
	NTU	0794	05/19/2004		46.7	#	_	_
	NTU	0794	10/19/2004		5.13	#	_	_
	NTU	0796	05/20/2004		59.1	#	_	_
	NTU	0796	10/19/2004		14.0	#	_	_
	NTU	0810	05/18/2004		2.01	#	-	_
	NTU	0810	10/20/2004		5.66	#	_	-
	NTU	0811	05/19/2004		97.0	#	-	_
	NTU	0811	10/21/2004		143	#	-	_
	NTU ·	0812	05/20/2004		54.3	#	-	-

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:09 am

PARAMETER	UNITS	LOCATIO	N SAMPL	.E: ID	RESULT	QUALIFIER LAB DATA		DETECTION	
						LAB DATA		LIMIT	CERTAINTY
Turbidity	NTU	0812	10/21/2004		13.9		#	-	-
	NTU	0822	05/18/2004		4.86		#	-	-
	NTU	0822	10/19/2004	N001	5.70		#	-	-
	NTU	0823	10/19/2004	N001	2.56		#	-	-
Uranium	mg/L	0747	05/20/2004	0001	0.440		#	2.8E-05	-
	mg/L	0747	05/20/2004	N002	0.420		#	2.8E-05	=
	mg/L	0747	10/21/2004	0001	0.190		#	8.3E-05	-
	mg/L	0749	05/20/2004	0001	0.0001	U	#	2.8E-06	-
	mg/L	0749	10/20/2004	0001	0.0001	U	#	8.3E-06	-
	mg/L	0794	05/19/2004	0001	0.0025		#	2.8E-06	-
	mg/L	0794	10/19/2004	0001	0.0041		#	8.3E-06	-
	mg/L	0796	05/20/2004	0001	0.0019		#	2.8E-06	-
	mg/L	0796	10/19/2004	0001	0.0034		#	8.3E-06	-
	mg/L	0810	05/18/2004	0001	0.0076		#	2.8E-06	-
	mg/L	0810	10/20/2004	0001	0.0051		#	8.3E-06	-
	mg/L	0811	05/19/2004	0001	0.0022		#	2.8E-06	-
	mg/L	0811	10/21/2004	0001	0.0032		#	8.3E-06	-
	mg/L	0812	05/20/2004	0001	0.0022		#	2.8E-06	-
	mg/L	0812	10/21/2004	0001	0.0032		#	8.3E-06	-
	mg/L	0822	05/18/2004	0001	0.0033		#	2.8E-06	-
	mg/L	0822	10/19/2004	0001	0.0073 E	Ξ.	#	8.3E-06	-
	mg/L	0823	10/19/2004	0001	0.0065		#	8.3E-06	<u>-</u>

SURFACE WATER QUALITY DATA BY PARAMETER (USEE800) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:09 am

LOCATION SAMPLE: QUALIFIERS: DETECTION UN-PARAMETER UNITS ID DATE ID RESULT LAB DATA QA LIMIT CERTAINTY

RECORDS: SELECTED FROM USEE800 WHERE site_code='RVT01' AND quality_assurance = TRUE AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED between #5/1/2004# and #11/1/2004#

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

- Replicate analysis not within control limits.
- Correlation coefficient for MSA < 0.995.
- Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- Increased detection limit due to required dilution.
- J Estimated
- M GFAA duplicate injection precision not met.
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compund (TIC).
- P > 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
- S Result determined by method of standard addition (MSA).
- U Analytical result below detection limit.
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- X Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Y Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
- Z Laboratory defined (USEPA CLP organic) qualifier, see case narrative.

DATA QUALIFIERS:

- F Low flow sampling method used.
- J Estimated value.
- Q Qualitative result due to sampling technique
- U Parameter analyzed for but was not detected.
- QA QUALIFIER: # = validated according to Quality Assurance guidelines.
- G Possible grout contamination, pH > 9.
- L Less than 3 bore volumes purged prior to sampling.
- R Unusable result.
- X Location is undefined.

Appendix D

Alternate Water Supply Data

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:17 am

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE			DEPTH RANGE			UALIFIERS		DETECTION	UN-
			·	DATE	ID	(FT BLS)	RESULT	LAE	B DATA (QA_	LIMIT	CERTAINTY
Alkalinity, Total (As CaCO3	-	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	168			#	_	-
	mg/L	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	160			#	-	-
	mg/L	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	154			#	-	-
	mg/L	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	162			#	_	-
	mg/L	0817	WL, EXDS	05/19/2004	N001		163			#	-	-
	mg/L	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	161			#	_	_
	mg/L	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	164			#	_	_
	mg/L	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	160			#	-	-
	mg/L	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	157			#	-	_
Chlorine, Total Residual	mg/L	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.04			#	-	_
	mg/L	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.03			#	_	_
	mg/L	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.02			#	_	_
	mg/L	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.02			#	_	_
	mg/L	0817	WL, EXDS	05/19/2004	N001		0.04			#	_	_
	mg/L	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	0.04			#	_	
	mg/L	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	0.04			#	_	_
	mg/L	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	0.15			#	_	_
	mg/L	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	0.04			#	_	_
Gross Alpha	pCi/L	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	1.72		J	#	0.891	± 0.70
	pCi/L	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	1.26		J	#	1.19	± 0.75
	pCi/L	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.991	U		#	0.991	± 0.62
	pCi/L	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	1.31	U	J	#	1.31	± 0.69
	pCi/L	0817	WL, EXDS	05/19/2004	N001		1.35		J	 #	1.22	± 0.09
	pCi/L	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	16.4		-	#	0.926	± 3.05
	pCi/L	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	18.6			#	1.43	± 3.49
İ	pCi/L	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	70.7			#	1.43	± 3.49 ± 11.7

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:17 am

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	L.A	QUALIFIE AB DATA	RS: [DETECTION LIMIT	UN- CERTAINTY
Gross Alpha	pCi/L	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	11.4			#	0.724	± 2.07
	pCi/L	0821	DS, HDRT	05/19/2004	N002	0.00 - 0.00	12			#	0.853	± 2.18
Gross Beta	pCi/L	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	1.98	U		#	1.98	± 1.10
	pCi/L	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	2.39	U		#	2.39	± 1.10
	pCi/L	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	2.95		J	#	2.09	± 1.25
	pCi/L	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	3.73		J	#	2.19	± 1.23
	pCi/L	0817	WL, EXDS	05/19/2004	N001		2.3		J	#	2.24	± 1.27
	pCi/L	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	24.3			 #	1.85	± 4.17
	pCi/L	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	24.1			#	2.1	± 4.17
	pCi/L	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	53.5			#	2.38	± 4.20 ± 8.81
	pCi/L	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	18.4			#	1.27	± 3.11
	pCi/L	0821	DS, HDRT	05/19/2004	N002	0.00 - 0.00	17.7			#	1.28	± 3.11
Oxidation Reduction Potent	mV	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	278			#	_	-
	mV	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	323			#	_	_
	mV	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	293			#	_	_
	mV	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	236			#	_	_
	mV	0817	WL, EXDS	05/19/2004	N001		97			#	_	-
	mV	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	93			 #	_	_
	mV	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	126			#	_	_
	mV	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	242			#	_	_
	mV	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	222			#	· <u>-</u>	_
Н	s.u.	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	9.19			#		
	s.u.	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	9.04			#		-
	s.u.	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	9.16			#	_	_
	s.u.	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	9.08			#	_	-
	s.u.	0817	WL, EXDS	05/19/2004	N001		9.21			#	· -	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:17 am

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT		QUALIFIEI B DATA		DETECTION LIMIT	UN- CERTAINTY
pН	s.u.	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	9.18			#		_
	s.u.	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	9.22			#	-	-
	s.u.	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	9.17			#	_	_
	s.u.	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	9.21			#	_	_
Radium-226	pCi/L	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.405	U		#	0.405	± 0.27
	pCi/L	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.263		UJ	#	0.193	± 0.19
	pCi/L	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.736	U		#	0.736	± 0.38
	pCi/L	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.718	U		#	0.718	± 0.39
	pCi/L	0817	WL, EXDS	05/19/2004	N001		0.783	U		#	0.783	± 0.42
	pCi/L	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	1.58		J	#	0.555	± 0.60
	pCi/L	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	1.64			#	0.347	± 0.58
	pCi/L	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	7.98			#	0.451	± 2.12
	pCi/L	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	1.64			#	0.454	± 0.60
	pCi/L	0821	DS, HDRT	05/19/2004	N002	0.00 - 0.00	0.766	U		#	0.766	± 0.52
Radium-228	pCi/L	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.72	U	-	#	0.72	± 0.35
	pCi/L	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.789	U		#	0.789	± 0.43
	pCi/L	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.759	U		#	0.759	± 0.38
	pCi/L	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.666	U		#	0.666	± 0.37
	pCi/L	0817	WL, EXDS	05/19/2004	N001		0.865	U		#	0.865	± 0.43
	pCi/L	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	2.31			#	0.746	± 0.82
	pCi/L	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	2.33			#	0.741	± 0.82
	pCi/L	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	7.93			#	0.746	± 2.43
	pCi/L	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	1.73		J	#	0.685	± 0.65
	pCi/L	0821	DS, HDRT	05/19/2004	N002	0.00 - 0.00	1.58		J	#	0.724	± 0.62
pecific Conductance	umhos/cm	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	628			#	-	_
	umhos/cm	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	630			#	_	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:17 am

PARAMETER	UNITS	LOCATION	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIERS: LAB DATA QA	DETECTION LIMIT	UN- CERTAINTY
Specific Conductance	umhos/cm	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	637	#	<u> </u>	_
	umhos/cm	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	622	#		_
	umhos/cm	0817	WL, EXDS	05/19/2004	N001		623	#		-
	umhos/cm	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	636	#		_
	umhos/cm	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	628	#	<u>.</u>	_
	umhos/cm	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	631	#	<u>.</u>	_
	umhos/cm	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	628	#		_
Temperature	С	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	10.7	#		-
	С	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	11.95	#		_
	С	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	9.9	#		
	С	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	13.1	#		_
	С	0817	WL, EXDS	05/19/2004	N001		13.6	#		_
	С	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	11.8	#		_
	С	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	10.0	#		_
	С	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	11.1	#		_
	С	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	11.2	#		-
Furbidity	NTU	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.93	#		-
	NTU	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.78	 #		_
	NTU	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	1.32	#		_
	NTU	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	1.51	#		_
	NTU	0817	WL, EXDS	05/19/2004	·N001		0.82	#		_
	NTU	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	2.67	#	_	_
	NTU	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	3.15	#		_
	NTU	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	8.15	#	_	_
	NTU	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	2.12	#	-	_
Jranium	mg/L	0813	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.00009 B	U #	2.8E-06	=

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:17 am

PARAMETER	UNITS	LOCATION ID	LOC TYPE, SUBTYPE	SAMP DATE	LE: ID	DEPTH RANGE (FT BLS)	RESULT	QUALIFIER: LAB DATA		DETECTION LIMIT	UN- CERTAINTY
Uranium	mg/L	0814	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.00018	J	#	2.8E-06	_
	mg/L	0815	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.00012	U	#	2.8E-06	-
	mg/L	0816	DS, TAP	05/18/2004	N001	0.00 - 0.00	0.00011	U	#	2.8E-06	-
	mg/L	0817	WL, EXDS	05/19/2004	N001		0.0001	U	#	2.8E-06	-
	mg/L	0818	DS, HDRT	05/19/2004	N001	0.00 - 0.00	0.00009	3 U	#	2.8E-06	-
	mg/L	0819	DS, HDRT	05/19/2004	N001	0.00 - 0.00	0.00011	U	#	2.8E-06	_
	mg/L	0820	DS, HDRT	05/19/2004	N001	0.00 - 0.00	0.00012	U	#	2.8E-06	-
	mg/L	0821	DS, HDRT	05/19/2004	N001	0.00 - 0.00	0.00009 E	3 U	#	2.8E-06	_
	mg/L	0821	DS, HDRT	05/19/2004	N002	0.00 - 0.00	0.0001	U	#	2.8E-06	-

GENERAL WATER QUALITY DATA BY PARAMETER (USEE205) FOR SITE RVT01, Riverton Processing Site REPORT DATE: 3/17/2005 9:17 am

QA QUALIFIER: # = validated according to Quality Assurance guidelines.

LOCATION LOC TYPE. SAMPLE: DEPTH RANGE QUALIFIERS: DETECTION UN-**PARAMETER** UNITS ID SUBTYPE DATE ID (FT BLS) RESULT LAB DATA QA LIMIT CERTAINTY RECORDS: SELECTED FROM USEE200 WHERE site_code='RVT01' AND location_code in('0813','0814','0815','0816','0817','0818','0819','0820','0821') AND quality_assurance = TRUE AND (data_validation_qualifiers IS NULL OR data_validation_qualifiers NOT LIKE '%R%' AND data_validation_qualifiers NOT LIKE '%X%') AND DATE_SAMPLED between #5/1/2004# and SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number. LOCATION TYPES: DS DOMESTIC SUPPLY WL WELL LOCATION SUBTYPES: EXDS Extraction Well Domestic Sup HDRT Hydrant TAP Tap in Domestic Supply Syste LAB QUALIFIERS: Replicate analysis not within control limits. Correlation coefficient for MSA < 0.995. Result above upper detection limit. TIC is a suspected aldol-condensation product. Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank. В С Pesticide result confirmed by GC-MS. D Analyte determined in diluted sample. Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS. Е Holding time expired, value suspect. Increased detection limit due to required dilution. Estimated GFAA duplicate injection precision not met. Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compund (TIC). > 25% difference in detected pesticide or Arochlor concentrations between 2 columns. Result determined by method of standard addition (MSA). U Analytical result below detection limit. W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance. Χ Laboratory defined (USEPA CLP organic) qualifier, see case narrative. Laboratory defined (USEPA CLP organic) qualifier, see case narrative. Z Laboratory defined (USEPA CLP organic) qualifier, see case narrative. DATA QUALIFIERS: Low flow sampling method used. Possible grout contamination, pH > 9. Estimated value. Less than 3 bore volumes purged prior to sampling. Qualitative result due to sampling technique Q Unusable result. Parameter analyzed for but was not detected. X Location is undefined.